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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,341	12/01/2003	Robert M. Byrne	ATL-14969	1266
7609	7590	07/15/2005	EXAMINER	
RANKIN, HILL, PORTER & CLARK, LLP 925 EUCLID AVENUE, SUITE 700 CLEVELAND, OH 44115-1405			ADDIE, RAYMOND W	
			ART UNIT	PAPER NUMBER

3671

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/725,341

Applicant(s)

BYRNE ET AL.

Examiner

Raymond W. Addie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8,10,12 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10,12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of grip structures comprising: A base having a continuous frusto-conical sidewall that is joined to the tread plate **and** a plurality of spaced-apart tabs joined to the base and extending upwardly therefrom must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the reference sign indicating the "base having a continuous frusto-conical sidewall and a plurality of spaced apart tabs joined to the base and extending upwardly therefrom". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10, 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. Claim 10 requires "a base having a continuous frusto-conical side wall...and A plurality of spaced apart tabs joined to the base and extending upwardly therefrom".

Applicant's Specification and Drawings, do not provide antecedent basis for a base having a continuous frusto-conical side wall, and a plurality of spaced apart tabs joined to the base; since the tabs (42) define the frusto-conical portion of the base, and hence, does not constitute a separate feature, as claimed.

**For examination purposes;** Claim 10 is being examined as though the grip structures comprise --A base having a continuous side wall that is joined to the tread plate and a plurality of spaced-apart tabs joined to the base and extending upwardly therefrom".

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10, 12, 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by

Mullaney et al.. # 3,181,440

Mullaney et al. discloses an anti-slip step (1) comprising:

A metal tread plate (10) with a top and bottom surface.

A plurality of grip structures (12), each having a continuous and curved base flange, as well as a plurality of spaced-apart tabs (16) joined to the base, each of said grip structures (12) at least partially defining a hole extending through the tread plate.

A plurality of drain holes (11, 14) extending through the tread plate.

Wherein said tabs of said grip structures are substantially angular in shape. See col. 2, ln. 37-col. 47.

In regards to Claims 2-4 Mullaney et al. discloses each drain structure (11, 14) further comprises: A plurality of spaced-apart tabs (16, 15) respectively, and that said drain structure tabs (15, 16) are joined to the tread plate (1) and the tabs are substantially angular in shape. See Figs. 1, 2; col. 4, lns. 41-54.

In regards to Claims 6, 7 Mullaney et al. discloses the grip structures are arranged in at least 2 rows, and the drain structures (11, 14) are arranged in at least 1 row. Such that the at least one row of drain structures is disposed between, and parallel to said at least 2 of said rows of grip structures (12). See Fig. 1.

In regards to Claims 8, 17 Mullaney et al. discloses each grip structure has a base that has a plurality of top ends, disposed between the tabs and the tabs have a plurality of top ends such that the top ends of the tabs have substantially the same length as the top ends of the base. See Fig. 1.

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In regards to Claim 10 Mullaney et al. discloses each of the grip structures (12) have a base that comprises a continuous side wall; and the tabs are frusto-conical in shape.

See Fig. 3.

In regards to Claim 12 Mullaney et al. discloses the grip structures extend upwardly form a top surface of the tread plate. Mullaney et al. also illustrates, in Fig. 3, the base of the grip structures as having a radius of curvature of approximately  $90^0$  with respect to the top surface of the tread plate; as well as the grip structure having a uniform height, such as 1 unit of measure. Wherein the ratio of the radius of curvature to the height of the grip structure is greater than 0.5.

In regards to Claims 15, 16 Mullaney et al. illustrates the holes of the grip structures has a diameter and a height, such that the ratio of the height of the diameter (H/D) is less than 0.5. See Fig. 3.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bahnfleth #

4,343,119 in view of Mullaney et al. # 3,181,440.

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Bahnfleth discloses a tread plate (10) with a top and bottom surface.

A plurality of grip structures (12) extending upwardly from the top surface of the tread plate (10) each grip structure (30) having a height.

Or a base (26) having a continuous side wall joined to the tread plate so as to form a radius of curvature (RC) between the base and the top surface of the tread plate.

Wherein a ratio of the radius of curvature to the height grip structure is less than 0.5; as illustrated in Figs. 1-3.

What Bahnfleth does not disclose is placing the spaced-apart tabs on top of the base and extending upwardly therefrom. However, Mullaney teaches it is desirable to provide an anti-slip step with a plurality of gripping structures, each gripping structure (12) having a plurality of spaced-apart tabs (16, 15) respectively, and a plurality of drain holes extending downwardly from said tread plate. See Figs, 1, 2; col. 4, lns. 41-54.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the anti-slip step of Bahnfleth, with a plurality of composite gripping tabs and a plurality of drain structures, as taught by Mullaney, in order to provide a "self-cleaning" feature to the anti-skid plate.

### ***Response to Amendment***

5. Applicant's cancellation of claims 9, 13, 14, 18-22 have overcome all rejections and objections, of the cited claims, from the Last Office Action.



***Response to Arguments***

6. Applicant's arguments filed 2/22/05 have been fully considered but they are not persuasive. Applicant argues against the reference to Mullaney et al. '440 by suggesting; "the tread plate according to Mullaney et al. does not include 'a plurality of drain structures extending downwardly from the bottom surface of the tread plate' as claimed in all of the independent claims pending".

Applicant supports the argument by suggesting "downwardly extending drain structures claimed in applicant's' independent claims are simply not present in any embodiments of the tread plate described in Mullaney et al.

However, the Examiner does not concur.

Although all the independent claims do recite "a plurality of drain structures extending downwardly from the bottom surface of the tread plate"; none of the claims structurally define what constitutes or is an equivalent structure to said drain structures.

To that affect, Mullaney et al. does disclose drain holes 11, 14 that do extend downwardly from the tread plate, as illustrated in Fig. 2.

Hence, an undefined structural feature cannot be used to show a lack of anticipation, when the prior art does disclose structural features capable of performing the intended function. In this case drain holes 11, 14 do function as drain structures.

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Applicant then argues "the sidewalls of the grip structures...appear to extend vertically from the plane of the tread plate...all of the independent claims specify that the side walls of the grip structures be continuous curved...or frusto-conical...structures that are joined to the tread plate...these elements...are not fairly disclosed, taught or suggested in Mullaney et al."

However, the Examiner does not concur.

Figs. 1-3 clearly illustrates the grip structures to be continuous curved structures that are joined to the tread plate.

Therefore, the arguments are not persuasive and the rejection is maintained.

Applicant then argues against the combination of Bahnfleth '119 in view of Mullaney et al. by suggesting "Bahnfleth...does not teach any drain structures that extend downwardly from the bottom surface of the tread plate, and thus does not supply the teachings that are missing from the Mullaney et al...previously discussed above...the combination of Mullaney et al. and Bahnfleth fail to disclose each of the elements of Applicants' anti-slip step as claimed in claims 12-14".

However, the Examiner does not concur.

Firstly, Applicant canceled claims 13 and 14. Hence, reconsideration of canceled claims is not possible.

Secondly, the rejection of pending claim 12 is unpatentable over Bahnfleth in view of Mullaney et al., as argued. Hence, there is no need for the reference to Bahnfleth to "supply teachings that are missing from the Mullaney et al. prior art".

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Further, Bahnfleth teaches it is known to provide anti-slip steps with either tabs or a continuous base, but not a composite gripping structure comprising both a base and a plurality of tabs extending upwards therefrom. However, Mullaney et al. teaches it is desirable to provide anti-slip plates with gripping structures that have a continuous base and a plurality of tabs extending upwards from said base, in order to permit the gripping structures to have a "self-cleaning" feature.

Therefore, Applicant's arguments are not persuasive and the rejection is maintained.

### ***Conclusion***

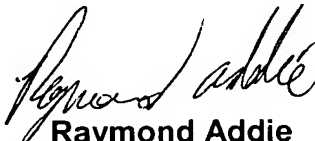
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 6AM-2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Raymond Addie**  
**Patent Examiner**  
**Group 3600**

7/11/05